

1-8. (CANCELED)

9. (NEW) A planetary transmission for machine tools, the planetary transmission comprising:

a drive shaft that is connected to a sun gear;

an output shaft connected to a planetary carrier and mounted over a transmission housing by an external bearing and an internal bearing, both of the external bearing and the internal bearing being separated from one another by a piston ring;

an axial bearing;

an interior gear which rotates over an interior gear bearing and is located in the transmission housing,

an axially displaceable sliding collar; and

a lubrication circuit in the transmission;

the housing being provided with an oil intake (13) that is connected to an oil pump located outside the transmission, the oil intake (13) supplies an oil flow over an oil line (16) to the external bearing (5) of the output shaft (3), the piston ring (8) is located between the external bearing (5) and the internal bearing (6), the oil intake (13) serves as an oil passage, in which the external bearing (5) is connected through an oil feeding circuit with the axial bearing (9), and the axial bearing (9) is connected with a cavity (17) in an interior gear bearing (11), the cavity (17) is encapsulated through a wall section (18) of the transmission housing to an existing oil discharge (14).

10. (NEW) The planetary transmission according to claim 9, wherein the oil feeding circuit, between the external bearing (5) and the axial bearing (9), comprises of at least one line (16', 16'') that run parallel in a symmetric level through a longitudinal axle of the drive shaft (3).

11. (NEW) The planetary transmission according to claim 9, wherein an oil intake (13) is provided in at least one of the internal bearing, the external bearing and the axial bearing and in the transmission housing.

12. (NEW) The planetary transmission according to claim 9, wherein the oil intake is located in a centered borehole in the output shaft (3).

13. (NEW) The planetary transmission according to claim 9, wherein a discharge of the piston ring (8), implemented in the piston ring (8), crosses parallel to the output shaft (3) axle, without any borehole (15) in either one of an external bushing or an internal bushing.

14. (NEW) The planetary transmission according to claim 9, wherein a piston ring (8) discharge is a narrow gap between the piston ring (8) and an external bushing.

15. (NEW) The planetary transmission according to claim 9, wherein when an adapter plate (21) is placed between the drive shaft and the planetary transmission, the plate (21) is provided with an oil intake (23) and with an oil line (22) so that the plate (21) is connected to a discharge borehole (25) with the transmission.

16. (NEW) The planetary transmission according to claim 9, wherein the oil intake becomes the oil discharge and the oil discharge becomes the oil intake.

17. (NEW) The planetary transmission according to claim 9, wherein the oil feeding circuit, between the external bearing (5) and the axial bearing (9), comprises of a plurality of lines (16', 16'') that run parallel in a symmetric level through a longitudinal axle of the drive shaft (3), the plurality of lines (16', 16'') are connected perpendicularly to each other over the longitudinal axle of the output shaft (3) and to a penetrating oil line (20).